IDENTIFYING INFORMATION:

NAME: Hirsch, Andrew Karl

ORCID iD: https://orcid.org/0000-0003-2518-614X

POSITION TITLE: Assistant Professor

PRIMARY ORGANIZATION AND LOCATION: University at Buffalo Department of Computer Science and Engineering, Computer Science and Engineering, Buffalo, New York, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
Cornell University, Ithaca, New York, United States	PHD	05/2019	Computer Science
Cornell University, Ithaca, New York, United States	MS	09/2016	Computer Science
The George Washington University, Washington, District of Columbia, United States	BS	08/2013	Computer Science/Mathematics

Appointments and Positions

2022 - present Assistant Professor, University at Buffalo Department of Computer Science and Engineering, Computer Science and Engineering, Buffalo, New York, United States

2019 - 2022 Postdoctoral Researcher, Max-Planck-Institut für Softwaresysteme, Foundations of Computer Security, Saarbrücken, Not Applicable, N/A, Germany

Products

Products Most Closely Related to the Proposed Project

1. GRAVERSEN E, HIRSCH A, MONTESI F. Alice or Bob?: Process polymorphism in choreographies. Journal of Functional Programming. 2024 January 23; 34:-. Available from: https://www.cambridge.org/core/product/identifier/S0956796823000114/type/journal_article DOI: 10.1017/S0956796823000114

2. Hirsch A, Garg D. Pirouette: higher-order typed functional choreographies. Proceedings of the ACM on Programming Languages. 2022 January 12; 6(POPL):1-27. Available from: https://dl.acm.org/doi/10.1145/3498684 DOI: 10.1145/3498684

3. Samuelson A, Hirsch AK, Cecchetti E. Choreographic Quick Changes: First-Class Location (Set) Polymorphism. Proceedings of the Association for Computing Machinery in Programming Languages. Forthcoming. Available from: https://arxiv.org/abs/2506.10913

4. Alexander Bohosian, Andrew K. Hirsch. Choreographies as Macros. Electronic Proceedings in Theoretical Computer Science. 2025 May. DOI: 10.4204/eptcs.420.2

5. Andrew K. Hirsch, Ethan Cecchetti. Giving semantics to program-counter labels via secure effects. Proceedings of the ACM on Programming Languages. 2021 January; 5(POPL):1--29. Available from: https://doi.org/10.1145%2F3434316 DOI: 10.48550/arxiv.2010.13191

Other Significant Products, Whether or Not Related to the Proposed Project

1. Silver L., He P., Cecchetti E., Hirsch A.K., Zdancewic S.. Semantics for Noninterference with Interaction Trees. Leibniz International Proceedings in Informatics, LIPIcs. Leibniz International Proceedings in Informatics, LIPIcs; 2023; c2023. DOI: 10.4230/LIPIcs.ECOOP.2023.29

2. Andrew K. Hirsch, Pedro H. Azevedo de Amorim, Ethan Cecchetti, Ross Tate, Owen Arden. First-Order Logic for Flow-Limited Authorization. 2020 IEEE 33rd Computer Security Foundations Symposium (CSF). 2020 June. Available from: https://doi.org/10.1109%2Fcsf49147.2020.00017 DOI: 10.48550/arxiv.2001.10630

3. Hirsch A, Tate R. Strict and lazy semantics for effects: layering monads and comonads. Proceedings of the ACM on Programming Languages. 2018 July 30; 2(ICFP):1-30. Available from: https://dl.acm.org/doi/10.1145/3236783 DOI: 10.1145/3236783

4. Jan Menz, Andrew K. Hirsch, Peixuan Li, Deepak Garg. Compositional Security Definitions for Higher-Order Where Declassification. Proceedings of the ACM on Programming Languages. 2023 April. DOI: 10.1145/3586041

5. Hirsch A, Clarkson M. Belief semantics of authorization logic. Proceedings of the 2013 ACM SIGSAC conference on Computer & communications security - CCS '13. the 2013 ACM SIGSAC conference; ; Berlin, Germany. New York, New York, USA: ACM Press; c2013. Available from: http://dl.acm.org/citation.cfm?doid=2508859.2516667 DOI: 10.1145/2508859.2516667

Certification:

I certify that the information provided is current, accurate, and complete. This includes but is not limited to information related to domestic and foreign appointments and positions.

I also certify that, at the time of submission, I am not a party to a malign foreign talent recruitment program.

Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Hirsch, Andrew Karl in SciENcv on 2025-09-08 21:25:00